

Serial No. 09/817,646
Docket No. LASP:104_US
Amdt. dated: January 27, 2004
Reply to Office Action of October 27, 2003

Remarks

Applicant inadvertently changed “microscope assemblage” to “method” for Claim 19 in the July 29, 2002 Amendment and Request for Reconsideration, without notating the change. Applicant is correcting the inadvertent change by amending the current Claim 19.

The Section 103 Rejection of Claims 12-22, 24-27, 30, 31, 34, and 35

The Examiner rejected Claims 12-22, 24-27, 30, 31, 34, and 35 under 35 U.S.C. §103(a) as unpatentable over United States Patent No. 5,035,476 (Ellis et al.) in view of United States Patent No. 5,681,987 (Gamble). To the extent the rejection applies to amended Claims 12 and 30, Applicant traverses the rejection and respectfully requests reconsideration.

(A) There is no suggestion, motivation, or teaching in Gamble to modify Ellis to form the invention of Claim 12. Amended Claim 12 recites the use of a second optical reference point defined by a focus of the light source. Ellis recognizes the problem of alignment in microscopes as shown in col. 1, lines 30-38, where he states: “But in the conventional microscope, a number of optical components are required to form a confocal arrangement. And a drawback of this microscope is that the optical system for guiding a transmitted light again to the deflecting element is complicated, and the microscope is accordingly large-sized. The microscope includes such a number of optical components that it is difficult to adjust their alignment.” The preceding is the only teaching Ellis contains regarding the alignment of a microscope. That is, he very clearly teaches that the number of optical components in a microscope is the principal obstacle to maintaining alignment of the components. Ellis does not disclose that the light source 51 can be

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adjusted in any manner to align the components of the microscope. Ellis then goes on to very clearly teach his solution to the above-mentioned alignment problem in col. 1, lines 49-52 where he states: "An object of this invention is to provide a confocal laser scanning transmission microscope which easily can provide an image of a transmitted light and includes a small number of optical components." Ellis is silent regarding optical reference points, beam paths, and adjusting a light source. The only reference to alignment in Ellis is the above quote from col. 1, lines 30-38. Thus, by only teaching the reduction of parts count in a microscope as an indirect means of addressing alignment problems, Ellis teaches away from defining and using reference points to adjust or align a light source.

Gamble discloses a resonance contact scanning force microscope with an adjustable light source. In col. 7, lines 13-15, Gamble states: "Adjustment screws 80 may be provided for adjusting the alignment and aiming of the laser light source, mounted in threaded access ports 81 provided in body." However, Gamble has no teachings as to how any adjustment of these screws would be determined. Gamble is silent with respect to defining and using optical reference points to adjust or align a light source. Further, there is no teaching, suggestion, or motivation in either reference to combine their teachings to create the invention claimed in Claim 12.

Further still, the Examiner has not demonstrated that the modification of the cited prior art reference points to the reasonable expectation of success in the present invention, which is the second requirement of the obviousness analysis.

With respect to the third requirement to support a *prima facie* case of obviousness, Ellis and Gamble do not teach nor suggest all the claim limitations. As discussed above, neither Ellis

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nor Gamble teach or suggest the definition or use of optical reference points to adjust or align a light source.

The combination of Ellis with Gamble does not recite the features of the invention of Claim 12. Since the combination of Ellis with Gamble neither suggests, nor contains all the elements of the claimed invention, the Examiner is requested to withdraw the rejection.

Claims 13-22, 24-27, and 34 and 35 depend from Claim 12, which, as discussed above, is patentable in light of the cited references. Thus, Claims 13-22, 24-27, and 34 and 35 are also patentable in light of the cited references.

(B) There is no suggestion, motivation, or teaching in Gamble to modify Ellis to form the invention of Claim 30. Amended Claim 30 recites the use of a second reference plane defined by an illumination stop and the light source laterally displaceable for alignment. Similar to the discussion above with respect to Claim 12 and reference points, there is no teaching, suggestion, or motivation in either cited reference for a light source alignable with respect to defined reference planes. Further, there is no teaching, suggestion, or motivation in either cited reference to combine their teachings.

Further still, the Examiner has not demonstrated that the modification of the cited prior art reference points to the reasonable expectation of success in the present invention, which is the second requirement of the obviousness analysis.

With respect to the third requirement to support a *prima facie* case of obviousness, Ellis and Gamble do not teach nor suggest all the claim limitations. As discussed above, neither Ellis

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nor Gamble teach or suggest the definition or use of optical reference planes to adjust or align a light source.

The combination of Ellis with Gamble does not recite the features of the invention of Claim 30. Since the combination of Ellis with Gamble neither suggests, nor contains all the elements of the claimed invention, the Examiner is requested to withdraw the rejection.

Claim 31 is dependent from Claim 30. Since Claim 30 is patentable over the cited references, Claim 31 is also patentable over the cited references.

The Section 103 Rejection of Claims 1-11, 23, 28, 29, 32, and 33

The Examiner rejected Claims 1-11, 23, 28, 29, 32, and 33 under 35 U.S.C. §103(a) as unpatentable over United States Patent No. 5,035,476 (Ellis et al.) in view of United States Patent No. 5,691,987 (Gamble) and further in view of United States Patent No. 5,214,492 (LoBianco et al.). To the extent the rejection applies to amended Claims 1 and 28, Applicant traverses the rejection and respectfully requests reconsideration.

(A) There is no suggestion, motivation, or teaching in Gamble and LoBianco to modify Ellis to form the invention of Claim 1. Amended Claim 1 recites the use of a second optical reference point defined by a focus of the light source. Similar to the above discussion of reference points for Claim 12, Ellis teaches away from defining and using reference points to adjust or align a light source and Gamble is silent with respect to defining and using optical reference points to adjust or align a light source.

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LoBianco discloses an apparatus for aligning apertures with a light beam by rotating the sample surface. There is no teaching, suggestion, or motivation with respect to defining and using optical reference points to align an optical beam path. Further, there is no teaching, suggestion, or motivation to combine LoBianco's teachings with Ellis and Gamble.

Further still, the Examiner has not demonstrated that the modification of the cited prior art reference points to the reasonable expectation of success in the present invention, which is the second requirement of the obviousness analysis.

With respect to the third requirement to support a *prima facie* case of obviousness, Ellis, Gamble, and LoBianco do not teach nor suggest all the claim limitations. As discussed above, Ellis, Gamble, and LoBianco, do not, in any combination, teach or suggest the definition or use of optical reference points to adjust or align a light source.

The combination of Ellis with Gamble and LoBianco does not recite the features of the invention of Claim 1. Since the combination of Ellis with Gamble and LoBianco neither suggests, nor contains all the elements of the claimed invention, the Examiner is requested to withdraw the rejection.

Claims 2-3, 5-11, and 32 and 33 depend from Claim 1. Since Claim 1 is patentable over the cited references, Claims 2-3, 5-11, and 32 and 33 are also patentable over the cited references.

Claim 23 is dependent from Claim 12. Since Claim 12 is patentable over cited references, Claim 23 is also patentable over the cited references.

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(B) There is no suggestion, motivation, or teaching in Gamble and LoBianco to modify Ellis to form the invention of Claim 28. Amended Claim 28 recites the definition and use of a second reference plane. Similar to the discussion for Claim 1 regarding reference points, Ellis, Gamble, and LoBianco, do not, in any combination, teach or suggest the definition or use of optical reference planes to adjust or align a light source.

Further, the Examiner has not demonstrated that the modification of the cited prior art reference points to the reasonable expectation of success in the present invention, which is the second requirement of the obviousness analysis.

With respect to the third requirement to support a *prima facie* case of obviousness, Ellis, Gamble, and LoBianco do not teach nor suggest all the claim limitations. As discussed above, Ellis, Gamble, and LoBianco, do not, in any combination, teach or suggest the definition or use of optical reference planes to adjust or align a light source.

The combination of Ellis with Gamble and LoBianco does not recite the features of the invention of Claim 28. Since the combination of Ellis with Gamble and LoBianco neither suggests, nor contains all the elements of the claimed invention, the Examiner is requested to withdraw the rejection.

Claims 4 and 29 are dependent from Claim 28. Since Claim 28 is patentable over the cited references, Claims 4 and 29 are also patentable over the cited references.

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Conclusion

For all of the reasons outlined above, Applicant respectfully submits that all pending claims are patentable and in condition for allowance, which action is courteously requested.

Respectfully submitted,



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